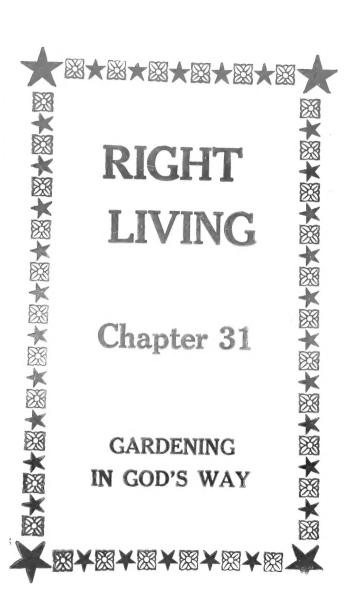
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Knowledge Puffeth up

God created man and placed him in a garden to dress it and to keep it, and told him he could eat of every tree of the garden, except the tree of the knowledge of good and evil. Of that tree He said: "In the day thou eatest thereof thou shalt surely die." But Satan told them that if they ate of that tree their eyes would be opened, and they would be as gods, knowing good and evil. We are all painfully aware of the results. Satan launched the race on a course of becoming as gods by the acquistion of knowledge. Today this doctrine is preached as never before. All the world needs, we are told, is more education and all its ills will be cured. The devil's lie is almost universally believed, tho 6,000 years of the acquisition of knowledge leaves the world in a worse condition than at any time in its history. Solomon said, 3,000 years ago, that the increase of knowledge increaseth sorrow. A few years ago a group of prominent

men were asked if they thought the progress man had made in knowledge and inventions had added to human happiness, and the answer was unanimously "No." But "ye shall be as gods", is still the driving power behind almost every human endeavor. Everyone is seeking to attain his ends at the expense of other people. The result: confusion. The end: chaos. We have discussed this subject more fully in chapter 30.

If any will not work, neither shall he eat. 2 Thess. 3:10-12

Because of his rebellion, man was driven out of the garden and told that by the sweat of his face he should eat bread. But, ever since, he has been trying to invent ways of eating bread without sweating for it. In other words, trying to get what he wants without working for it. This is the purpose of all his educational systems. This is behind all labor unions, and all industrial institutions. But can man violate

God's laws and not pay the penalty? As well might he try to stop the sun from rising. Every attempt man makes to get his living without work or with very little work ends in wickedness. "Satan finds some wickedness for idle hands to do." The poor want more money and less work; more money to waste and more time to waste it. The rich want more to hoard, to satisfy their lusts. The true saying: "Not what we gain, but what we give, measures the worth of the life we live," has never entered the minds of either one.

God's Way cannot be improved.

God knows how to grow luxurious trees and plants, and no one has ever invented a better way. Modern agriculture is as far from God as modern religion. Man is rapidly ruining the soil thru methods that produce products that look very fine in appearance but are disastrous to human life and happiness. One is reminded of what the Lord said to Samuel: "Man looketh

in the outward appearance, but the Lord looketh on the heart." foods that are being produced by modern methods are deficient in life and health producing qualities. Anemic foods are producing anemic people. Foods and drinks that ircitate the system instead of satisfying it, are producing vicious people, bent on fighting; and from the home to the community, the state, the nation, and the whole world, war is in the air. Foods are not the only cause of this but are a contributing factor. We are not writing with the hope of reforming the world; that is impossible; but for the benefit of the Lord's own chilren who want to walk in His ways in material things as well as spiritual. Most, even of these have been seduced by the learning and inventions of men, and they wonder why they are physically ill and devoid of peace and rest. Most folks taste with their eyes. They buy, or seek to produce foods that look good, with little consideration for quality. The finest appearing foods are most 965

likely to be the least nourishing, and the most irritating. The great amount of attention given in these days to mineral salts and vitamins will not produce any good results so long as we insist on walking in man's ways instead of God's. What may be gained in one way will be destroyed in another. There is only one way to health and happiness: "Back to nature and nature's God."

The principles that govern the growing of natural foods are very simple, and do not require volumes to state them. The whole fundamental truth is involved in the question: "What is nature's way?" Just as in religious activities, we have become so accustomed to doing things in the way other people do, that we have hardly stopped to think whether this is God's way or not. If God has a will and a plan for His people, it extends to the most minute details of our lives.

Keep Soil Covered

One of the first principles is that nature never leaves any ground bare.

If man makes it bare, nature covers it with weeds. One of the greatest crimes against nature man is guilty of, and for which he has suffered much, is that of making the ground bare and leaving it bare for long periods. Weeds are among the best friends the plant grower has. When soil is left bare the sun, wind, and rain rapidly leach out and carry away the fertility and much of the soil itself. In our selfish greed we take off from the soil everything we can use to satisfy our lusts and leave the soil bare. Soil left bare becomes hard and the food elements insoluble. On the other hand, soil kept covered, even with boards or stones, or any other material, becomes mellow and the plant food soluble, so that the roots of the plant can absorb it.

Man has destroyed the vegetation of the western plains and the wind has blown the soil away. They reaped what they sowed. Any piece of ground that is left bare will lose some of its best soil in a wind storm. The present use of the land in this

country will certainly bring on a famine, and we do not believe the time is very far distant. Every blessing God has given man he has wasted to satisfy his lusts, and now he must pay the penalty.

Weeds,- Our Friends.

In tilling the soil it is of course necessary to have it bare for short periods, but some form of plant life or other substance should cover it as quickly as possible. My father observed, when I was a boy, that the neighbors who had the best gardens were those who allowed the weeds to cover them in the fall. But he did not profit by his observation for he always kept his garden free from weeds. The result was that he spent a great deal of time and money on that garden and never had a really good one. Far better let nature cover the soil with weeds than to leave it bare. When we have taken a crop from the soil, and do not intend to plant another soon, we sow a cover crop or cover it lightly with organic matter, hay, straw, weeds,

leaves. Buckwheat is a good cover crop but it should not be allowed to grow long enough to ripen as it will be troublesome as a weed. Oats are also very good particularly for late planting as they will grow even after light frosts and die before spring. They do not reseed the next year like buckwheat. Wheat and rye are used much as cover crops, but we do not like them for the reason that they live over winter and are hard to dispose of in the spring. A cover that does not live over winter is best for the garden.

Humus, Organic Matter Life Only from Death

Humus, decaying vegetable or animal matter, is absolutely essential for plant growth. Soil that contains no humus will not produce a crop. But humus should be kept largely on top of the soil or mixed with the first three or four inches, but never turned under. When turned under, where the air is largely excluded, it ferments and

produces an acid condition which is detrimental to plant life. Back to nature. She never does any plowing, but keeps the organic matter on top or near the surface. Humus keeps the soil moist by causing it to retain more of the rainfall and also prevents rapid evaporation. A neighbor had a forest of large beautiful trees, and he thought he would improve it by cutting out the undergrowth and sowing it to grass for matter. This allowed the leave of the ravines and a few dry coalous killed all his trees.

The decaying of organic matter dissolves chemical elements of the soil and renders them available to the plant. In a very limited way plants have the power to dissolve these elements themselves, but not to the extent of producing a good crop. Most virgin soils contain all the chemical elements neccessary to the growth of food plants, but when man has misused it for years these elements are either lost or are insoluble. The value of keeping the soil covered and mixed with organic

material is to preserve these materials and render them available to the plant.

A False Notion

It is commonly supposed that the addition of humus to the soil tends to make it acid, because there is a certain amount of fermentation in decomposition. But this is true only when unnatural methods are used, The addition of quantities of fresh barnyard manure or the turning under of green crops produces acidity. But the natural decomposition of organic matter on the surface or mixed with the top soil, where sufficient air is present, will not produce acidity. Many people suppose that those who have an acid condition of the stomach should not use acid fruits. The fact is that many of the acid fruits are the best cure for acidity, since the acid they contain is not the same as stomach acid, but another kind which helps to counteract the acid of the stomach. The acid commonly found in acid soil is not the same as the acid produced

by decomposition, but is of a kind that helps to counteract soil acidity.

Lime,- injurious

Many advocate the use of lime in connection with organic matter. Lime does burn up the organic matter more rapidly and renders the plant food more quickly available, but it also leaves much of this available food free to be carried away by wind and rain. Limed soils make a rich father but a poor son. We use large quantities of organic matter on our garden but never any lime, and we never have any trouble with acidity, except on very poorly drained soil. Nature does not put lime on the soil where she produces luxurious vegetation. Neither does she use commercial fertilizers. A few years ago we tried a good (?) grade of commercial fertilizer on some rows in connection with alternate rows without fertilizer. We harvested on the average about half as much from the fertilized rows as from those unfertilized, and the quality of the fertilized portion was

inferior. Our garden contains all the elements necessary to good plant growth, and the fertilizer acted as a poison. The addition of organic matter to the soil brings all the elements necessary to the life and health of the plants. It is true, however, that the soil on which organic matter is grown determines, to some extent, its value. If you can secure matter from swamps and virgin soil, and leaf mold from forests you have an advantage. But almost any kind of organic matter is better than none.

Lime mixed with sand and certain kinds of clay will harden atmost like stone. Hime on soil does the same. It have an into or one malter in the soil have so that the plant foods laus uporated are carried off by surface water. The chief element in lime is calcium, and this element is present in organic matter in sufficient quantities for all plants. True enough, lime may improve the growth of a crop, but it does so by liberating the plant food that the soil contains, making it available to the plant, but

it liberates it so rapidly that much of it is carried into the air, and washed away by rains. Soil thus treated will in time become worthless. A drink of whiskey will pep you up and make you feel good (?) for a time, but what about the after effects? The whiskey liberates the energy the body already contains and leaves it impoverished.

Everything Up-side-down

Nature never plows the soil, turning it up-side-down. That is an upside-down way of farming. Nature keeps the soil loose by keeping it covered, by the decaying of roots and by the burrowing of worms. Tilling the soil was commanded in the Scriptures but not in the way it is being done now. The crude plows used in ancient times were more productive of good results than those used now. Soil may be loosened to almost any depth but it should never be turned over putting the good soil underneath and the poorer on top. Our garden has not been plowed for 15 years. We use a Roto-

tiller to loosen the top soil and a subsoiler that runs 16 to 18 inches deep to loosen the subsoil but not turn it over. Soil loosened to that depth will seldom lose any water by surface drainage. This means that it retains much more water than other soils and is better prepared for dry weather. It can also be worked sooner after a hard rain as it does not retain any standing water on top. We till only 3 or 4 inches deep, and less than that when cultivating crops.

Subsoiling

A subsoiler is nothing but a hook that runs deep into the soil breaking it up, but not turning it over. It can be used with a horse, with a garden tractor or with a farm tractor. We use a Ford tractor with the subsoiler on the power lift. If your garden contains a hard subsoil it will suffer from drouth weeks before one in which the soil is loose deeper. If it contains little humus the result will be the same.

Nitrogen

Nitrogen is considered by the modern farmer to be a very essential fertilizer, and is usually applied in chemical form, but sometimes by the use of manure and turning under nitrogen gathering crops, the legumes. Our soil shows little benefit from the use of any of these, and they have sometimes proved a decided disadvantage. Nitrogen tends to produce luxurious vegetation of a very inferior quality. Plants will grow larger and to the casual observer more desirable with nitrogen. but they are far more subject to disease and decembra those grown on a properly bandled soil. They was tain apmedictly less noof your per pound when grown with an excess of nitrogen. This is especially true with plants where the fruit is eaten instead of the leaves or stems. Nitrogen tends to produce a large growth of leaves and stems with less amount of fruit, of an inferior quality. On beans and tomatoes I have seen the yield almost completely destroyed

by the use of nitrogen, tho the growth of the plants was enormous. All organic matter contains some nitrogen but seldom enough to be injurious. The use of organic matter as a fertilizer provides a balanced diet for the plant in a form in which it can use it best, and that positively cannot be supplied in any other way. Back to nature, please. Leaves of trees are a particularly good source of humus as the tree penetrates deeply into the soil and thus has an unlimited source of supply.

Cow Sense

A cow will not eat the grass that grows by a manure pile in the field, if she can find anything else. But man will take the same manure and put it on his garden and eat the food that grows from it. Of course the cow has more sense than the man for she doesn't have a fallen nature, to lust after evil things. The cow will not eat the grass because it is inferior, being grown with an excess of nitrogen. No kind of manure should be used on crops that are in-

tended to be eaten unless it is thoroughly rotted. Not only is such food inferior in quality, but is subject to disease and decay. Barnyard manure may be applied to the soil if some cover crop is planted on it the first year, then used for food crops the second year. Many forms of disease are traced to the use of foods grown on land fertilized with manure.

We are sorry for those who have to buy their food at the grocery. Not one farmer or food manufacturer in a hundred, has the health and happiness of his customers at heart. The modern way produces more dollars for himself, the doctor—and the undertaker.

Soil well supplied with organic matter on top or tilled into the top layer will remain loose and mellow all summer, no matter how hard the rains, while soil with insufficient humus will become hard. A hard soil is difficult to till, difficult for plant roots to penetrate, and loses much needed water by surface drainage.

Compost

Compost heaps are widely recommended, but nature does not make compost heaps. Much of the value of the organic matter is lost in this way, carried off by wind and water. The best place to decompose organic matter is in or on the soil where you want it. For gardens this can be done by spreading the matter on part of the garden while the other part is being used, or placing it around plants and between rows. Let part of your garden be a compost plat while you use the other part. The land needs rest just as you do. God's law for Israel was to let the land rest every seventh year, and because they did not do it He drove them out of the land that she might enjoy her sabbaths. If you profess to be a child of God better sit up and take notice. Where one has only a small garden the compost heap may be admissible, but where possible the organic material should be allowed to decay on, or in the soil. Making and caring for a com-

post heap is too expensive to be practical when other more natural methods can be used. Compost is good but you cannot improve on

God's way of making it.

Organic matter left on top of the soil may be coarse without having any ill effects, but if it is to be incorporated with the soil it should be sufficiently decayed to be finely pulverized; otherwise it may keep the soil too porous and cause the loss of moisture. TOO MUCH humus will do this even when finely pulverized. Examine the soil in a woodland, On the top you find coarse leaves. Next you find partly decayed leaves and then pulverized leaves mixed with soil. Let mature teach you. Did you ever see a forest turning the soil apside-down and putting the leaves under? This is not a popular way of gardening, but did you ever hear of any of God's ways being popular? And did you ever hear of anyone going contrary to God's ways and not paying the penalty?

Most of the so-called improvements man has made in varieties of

plants have been to his own destruction. Larger yield and finer appearance is the purpose. But in order to get this he must sacrifice quality. That does not matter, however, as what he wants is something to turn into money, the root of all kinds of evil. He has succeeded in producing more starch, and more protein, and sometimes more fat, but in doing so he has sacrificed the vital elements. He has also succeeded in producing more fruit for the hospitals, the asylums and the penal institutions. Man never picked up anything that God made that he did not spoil it.

Natural Soil Covers

For perennial trees and plants one does not need to till the soil, but may keep it covered year after year with humus. This keeps down the weeds, holds the moisture and provides an ideal soil for good growth. This is nature's way of growing nearly all her plants.

The Great Life-giver

The sun is the one great life-giving and disease-destroying power in the physical universe, just as the Son-of-Righteousness is the only life giver and sin-destroyer in the spiritual universe. People seem to be afraid of the sun just as they are the Son. They build houses and pull down the shades to keep out the sun and then turn on the artificial light. The average woman cares more for the color in her rugs than for the color in her children's cheeks. Her neighbors might look down on her if her rugs were faded, but when her little girl's cheeks fade the simpletons only pity the little girl instead of reprimanding the mother. In the spiritual universe people build churches to keep out the Son, they put on garments of selfrighteousness and turn on the artificial lights of human wisdom and goodness.

Use What You Have

Probably the most important principle in good gardening is to do everything possible to so condition the soil that the plant food it contains is rendered available. Instead of buying plant food use what you have. This fact has largely been lost sight of by farmers and garden-ers in ceneral. They lock up the plant from hy improper methods and from find their soil unproductive. They reason that the land is deficient in some plant food and they proceed to apply chemical fertilizers. The old slogan: "There is plenty of gold in the farm, boys, if you'll only shovel it out", might be changed to read: "There is plenty of food in the soil, boys, if you'll only let it grow out."

Don't Mix Mud

In this connection we would emphasize that great damage is done to the soil by working it wet. The old rule is to take a hand full of soil and squeeze it firmly in the hand, then 983

drop it on the ground, and if it crumbles freely it is in good condition for tilling, but if it remains in lumps it is too wet. If soil is disturbed when wet it hardens into clods which give up their plant food very reluctantly. It requires years of careful handling to overcome the ill effects of wrong handling. Better lose a few day's time than to destroy the productive texture of the soil.

Retaining Moisture

Where retention of moisture is important, frequent shallow tilling is advisable, to break up the capillary pores and prevent evaporation. But deep cultivation defeats its own purpose, as it turns moist soil up to the air and moisture is lost. Going over the soil frequently will not pack the under layers unless it is too wet, as you cannot pack dry soil. So long as there is plenty of moisture in the soil cultivation should be used only to keep down weeds. Where it is necessary to pull weeds by hand, this may be done when the soil is too wet

to till, but this should be the exception rather than the rule.

Watering

When it is necessary to apply water to the soil by artificial means. do not sprinkle a little water on the surface, but soak it throughly several inches deep, and then not again for a week or ten days. A little water sprinkled on the surface forms a crust which cracks and causes rapid evaporation, and conditions are made worse rather than better. The commonly accepted idea that watering should not be done when the sun is hot, is not true if a copious supply of water is used, as this cools the soil and the plant, and no evil effects follow. If only a little water is sprinkled on a hot day it may scald the plants and is soon evaporated producing ill effects rather than good. You have noticed how plants grow during a season when we have a shower and then the sun comes out hot afterward. That is the ideal growing weather and you cannot improve on nature.

Just look how the weeds grow too!

Keeping the Soil Cool

Many crops like potatoes and tomatoes may be grown to perfection without tilling if the ground is kept covered with organic matter. Much time can be saved in this way as no work is needed after the plants are set. It is a common practice to put straw around strawberries to keep them clean, but this is not the main advantage of the straw. Strawberries are a cool weather crop, and the organic material spread on the surface keeps the soil several degrees cooler. For this reason the mulch should not be placed on the ground in early spring if an early crop is desired. Wait until the ground is fairly warm, just before blossoming time as plants should not be disturbed during blossoming season.

In the summer when the ground is likely to become too hot a covering of any kind of material is a wonderful help. Burning leaves and grass about the lawn and garden is

a vicious practice. Sometimes it is done to get rid of insects and diseases, but the excuse seldom justifies the waste. We use all the leaves we can get and never have any trouble from such sources.

Insects

It is claimed that plants grown the natural way are not as subject to insects as those grown by modern methods, but we have failed to see any difference in this respect. Insects like good food just as we do, and they certainly know where to find it. There is, however this difference, and it is very important. Plants that are vigorous and healthy are not so much affected by the loss of a few leaves or other parts as those that are weak and anemic. One year we gathered 5 bushels of Japanese Beetles from our plat of soy beans, and there were bushels left. The beans did not seem to suffer from the loss of leaves, but made an excellent crop.

.We do not claim any miracles for natural gardening, for God does not perform miracles when natural means will suffice. But we do know that the advantage of doing things in God's way far exceeds anything man has ever invented. Most spiritual work is also fruitless because it is done in man's way instead of God's. God made man upright but he has sought out many inventions. And God says, He will take vengeance of their inventions. Ps. 99:8.

Diseases

We have never found it necessary to use sprays for fungus diseases, after our ground was in the proper condition. Disease doesn't like the kind of plants we grow. Disease in plants, like disease in people, thrives on weak and decaying tissue, and if there is no such tissue there is no disease. It requires a strong vigorous plant to withstand the diseases that are prevalent now, but it is possible to grow such plants.

O how unlike the complex ways

of man,

God's easy, artless, unencumbered plan.

If your garden is properly handled, you can grow the same kind of crop on it year after year without it becoming impoverished. Does not nature grow practically the same crops on the soil for thousands of years? In growing legumes like beans and peas, they produce much better if grown on the same land year after year, as the soil becomes inoculated for the nitrogen gathering bacteria. We produced more than 5 times as many peas on a row that had peas on it for years as we did on an adjoining row that had never had peas before. I know of no objection to rotating other crops but I have not found any advantage, on our soil, except that the land may have rest as mentioned in a previous paragraph.

Spiritual Lessons in Plants

I am sorry for the man or woman who does not like to work in a garden and produce fine fruits and vegetables. One can learn a great deal about God and His purposes from plants. They all have some 989

typical or spiritual meaning. One could write many chapters on the forms and habits of plants. For example: Corn is a type of Christ and His church. Christ is the center, the cob, around which all His people grow, and from which they receive their nourishment. The embryo grain of corn sends out its tiny silk, the hand of faith, and the wind, type of the Spirit, brings the pollen, life from above. The pollen grain sends its life down the long silk and gives life to the embryo. No grain will develop unless it receives this life from the pollen. No person ever becomes a child of God except he be born again with life from above. The one who does not extend the hand of faith and lay hold on eternal life, withers away and is destroyed. The whole ear of corn including the cob is protected by the husk. The church is just as safe as Christ Himself, and one believer just as safe as any other. Each grain is personally attached to the cob, but they are so closely associated that each one takes its shape largely

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from association with the others. Believers are related to each other only by their relation to Christ, but their lives are largely shaped by their association with each other. Loving Christian fellowship is of profound importance to every believer. The husk is part of the cob, growing out over the grains, just as the Lord speaks of protecting His people with His wings. The pollen is provided in such quantities that the pollen from one stalk would be sufficient to give life to a whole field. Christ Who is the vine, the stalk, has provided life for the whole field, the world. These are a few thoughts on the typical meaning of just one of the plants that grow in our gardens. Much more might be learned from just this one, to say nothing of the hundreds of others.

Paul tells us in Romans, 1:20: that which may be known of God, is clearly seen by the things that are made, even His eternal power and Godhead, so that anyone is without excuse who does not know God. The green of most plants, the bright

color of flowers, red, yellow, blue and violet, and the varied hues of fruits, long to tell us about God, but we close our eyes and stop our ears. No one will say before the great white throne: "I did not have an opportunity to know God."

I have written in these pages some of the things I have learned from Scripture and from nature and my desire is that these things may be as great a blessing to my readers as they have been, and are, to me.

"Nature is what God made to live:

Art is what man made to die."